```python
#Using SQLITE to create a single table


import sqlite3
import os


# Function that prints out a table containing some records
# using SQL select command
def print_table(sql):
    db.execute(sql)
    all_rows = db.fetchall()
    for row in all_rows:
        for i in row:
            print(i, end=' | \t')
        print()
    print()


# Remove database if it exists; probably not a good idea
if os.path.isfile('database.db'):
    os.remove('database.db')


# Create database and open database
conn = sqlite3.connect('database.db')
db = conn.cursor()


# Create table
db.execute("""CREATE TABLE book
        (bookID INTEGER PRIMARY KEY,
        author TEXT,
        title TEXT,
        year INTEGER,
        publisher TEXT)""")

# Insert values using simple insertion

db.execute("INSERT INTO book VALUES (1,'JK Rowling',\
        'Harry Potter and the Order of the Phoenix',\
        2003,'Bloomsbury')");


# Insertion specifying the attribute names

db.execute("INSERT INTO book (bookID,author,title,year,publisher) \
        VALUES (2,'Michael Morpurgo','War Horse', 1982,'HarperCollins')");
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```python
# Auto adding the value for the primary key using NULL
db.execute("INSERT INTO book (bookID,author,title,year,publisher) \
        VALUES (NULL,'Michael Morpurgo','Private Peaceful', \
        2003,'HarperCollins')");


# Insertion using variables
author="Roald Dahl"
title="The BFG"
publisher="Penguin"
db.execute("INSERT INTO book (bookID,author,title,publisher) \
        VALUES (NULL,?,?,?)",(author,title,publisher));


# Things to experiment with:

# What happens if you give the same value for the primary

# key for more that one record?

# Remove PRIMARY KEY from create tables, what happens now?



# updating records
db.execute("UPDATE book SET year=1982 WHERE author='Roald Dahl'")
# or
year=1982
db.execute("UPDATE book SET year=? WHERE author='Roald Dahl'",(year,))
#or
sql="UPDATE book SET year=1982 WHERE author='Roald Dahl'"
db.execute(sql)


# Deleting records
# db.execute("DELETE FROM book WHERE author='JK Rowling'")


# selecting data from a database
sql="SELECT * FROM book"
print_table(sql)


conn.commit()

conn.close()
```